## ABSTRACT OF THE INVENTION

Please insert Abstract of the Invention as follows:

The invention relates to a transponder circuit comprising a high-quality resonator and a demodulator. After being demodulated, the AM-modulated signal emitted by an emitting and receiving appliance has a frequency corresponding to the resonance frequency of the high-quality resonator, for exciting the high-quality resonator. Said transponder circuit also comprises a rectifier, an energy accumulator and a semiconductor circuit which are connected downstream of the resonator. The input impedance of the high-quality resonator is adapted to the loaded impedance of the semiconductor circuit in such a way that a supply voltage for the semiconductor circuit is obtained in the energy accumulator by means of the impedance transformation. Data and/or measuring values can be retrieved and/or updated in a non-contact manner by radio by means of the transponder circuit. The inventive transponder circuit can be applied to ID generators, sensor systems which are solf0sufficient in energy or memories for data, for example for measuring systems.